

**ABSTRACT**

A novel, environmentally friendly and resource-saving method for the production of fractionally homogeneous compositions of microcrystalline cellulose (MCC) is provided. The method comprises of the following steps: (a) hydrolyzing cellulose-containing raw material with at least one acidic catalyst in the presence of at least one process additive at a low catalytic system/cellulose ratio; (b) neutralizing said acid with one or more precipitator in a manner that fine particles of insoluble ingredients precipitates into a slurry containing MCC; (c) admixing at least one modifier; following by (d), homogenizing of the composition so that a MCC product characterized by a uniformly dispersed micro-particle cellulose material and various functional ingredients is obtained.